Listing of Claims:

1. **(Currently Amended)** A rare earth doped fiber coil, said rare earth doped fiber coil comprising:

a rare earth doped optical fiber having a rare-earth doped core surrounded by a cladding with outer clad diameter of less than 90 μm ~~100μm~~, said rare earth doped optical fiber having a length of 10 m to 50m and being coiled with a bend radius of less than 40mm.

2. **(Canceled)**

3. **(Original)** The rare earth doped fiber coil according to claim 1, wherein said clad diameter is in the range of 72μm to 90μm

4. **(Original)** The rare earth doped fiber coil according to claim 1, wherein said clad diameter is in the range of 75μm to 85μm.

5. **(Currently Amended)** The rare earth doped fiber coil according to claim 4 [[1]], wherein said rare earth doped optical fiber is an Er doped optical fiber.

6. **(Original)** The rare earth doped fiber coil according to claim 5, wherein said bend radius is between 8mm and 35mm.

7. **(Original)** The rare earth doped fiber coil according to claim 5, wherein said bend radius is between 8mm and 20mm.

8. **(Original)** The rare earth doped fiber coil according to claim 5, wherein said bend radius is between 10mm and 15mm.

9. **(Original)** The rare earth doped fiber coil according to claim 1, wherein said bend radius is between 8mm and 20mm.

10. **(Original)** The rare earth doped fiber coil according to claim 1, wherein said bend radius is between 10mm and 15mm.

11. **(Currently Amended)** An optical amplifier comprising: a length of rare earth doped amplifying fiber, said amplifying fiber having a rare-earth doped core surrounded by a cladding with outer clad diameter of less than 90 μm ~~100μm~~, said rare earth doped optical fiber having a length of 10 m to 50m and being coiled with a bend radius of less than 40mm.

12. **(Original)** The optical amplifier according to claim 10, wherein said rare earth doped optical fiber is an Er doped optical fiber.

13. **(Original)** The optical amplifier according to claim 10, wherein said bend radius is between 8mm and 20mm.

14. **(Canceled)**

15. **(Original)** The optical amplifier according to claim 10 wherein said outer clad diameter is between 72μm and 90μm.

16. **(Original)** The optical amplifier according to claim 10 wherein said outer clad diameter is between 75μm and 85μm.